

Nemo etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

Engineer Test Consult

P.E. EVALUATION REPORT (PEER)

IKO INDUSTRIES LTD

40 Hansen Road S Brampton, ON L6W 3H4 Canada (416) 529-3606 PEER-IKO-001.A.R2

FL40565-R2 (NON-HVHZ)
Date of Issuance: 12/20/2021

Revision 2: 02/28/2024

SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') is issued under <u>Rule 61G20-3</u> and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **8**th **Edition (2023) Florida Building Code** sections noted herein.

DESCRIPTION: IKO Innovi TPO Roof Systems (NON-HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein.

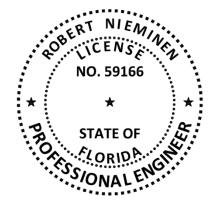
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) preceded by the words "NEMO P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be done in its entirety.

Inspection: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 4, plus a 12-page Appendix.

Prepared by:



CERTIFICATION OF INDEPENDENCE:

- 1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
- 2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
- 3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the PEERs are being issued.
- 4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
- 5. This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

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ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing

Sub-Category: Single Ply Roof Systems

Product Approval Method: Method 1, Option D: Codified Material, Evaluation by Engineer

Compliance Statement: IKO Innovi TPO Roof Systems, as produced by **IKO INDUSTRIES LTD**, have demonstrated compliance with the following sections of the **8**th **Edition (2023) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the <u>Installation Requirements</u> and <u>Limitations of Use</u> set forth herein.

| 2. | STANDARDS: | | |
|----|------------|---------------------|------------|
| | SECTION | PROPERTY | Standard |
| | 1504.3.1 | Wind resistance | FM 4474 |
| | 1504.6 | Physical properties | ASTM G155 |
| | 1504.7 | Impact resistance | FM 4470 |
| | 1507.12.2 | Material standard | ASTM D6878 |

3. REFERENCES:

| ENTITY | EXAMINATION | REFERENCE | DATE |
|------------------------|------------------------|-------------------------|------------|
| NEMO (TST6049) | Physical properties | 4q-IKO-21-SSMBB-01.A | 12/10/21 |
| NEMO (TST6049) | ASTM D6878 / G155 | 4r-IKO-21-SSTHP-01.A | 01/18/22 |
| FM Approvals (TST1867) | Criticality | PR454078 (data) | 01/21/21 |
| FM Approvals (TST1867) | FM 4470/4474 | PR454078 | 04/29/21 |
| FM Approvals (TST1867) | FM 4474 | PR456625 | 07/12/21 |
| NEMO (TST11294) | FM 4474 | 2a-IKO-20-LSWUS-01.A | 06/02/21 |
| NEMO (TST11294) | FM 4474 | 2a-IKO-21-LSWUS-01.A-R1 | 07/27/22 |
| NEMO (TST6049) | Criticality | 4i-IKO-20-SSCRT-01.A | 02/24/21 |
| NEMO (TST6049) | FM 4474 | SFS-SC10010.12.20-R1 | 06/21/21 |
| NEMO (TST6049) | FM 4474 | 4a-IKO-23-LSWUS-01.A.R1 | 01/12/24 |
| NEMO | Data Release Agreement | NE-FRM-0025-PR456625 | 09/27/21 |
| NEMO | Traceability | FBC-PCL-ATL | 02/26/24 |
| NEMO | Traceability | FBC-PCL-AB | 02/27/24 |
| UL LLC (QUA 9625) | Traceability | ML R16377/R20739 | 01/14/21 |
| FM Approvals (QUA1840) | Traceability | PR459818 | 06/08/21 |
| FM Approvals (QUA1860) | Quality Assurance | Inspection Report | 02/22/2023 |
| FM Approvals (QUA1860) | Quality Assurance | Florida BCIS | Current |

4. PRODUCT DESCRIPTION:

This PEER covers **IKO Innovi TPO Roof Systems** installed in accordance with **IKO INDUSTRIES LTD** published installation instructions and the <u>Limitations of Use</u> herein.

| TABLE 1: EVALUATED MEMBRANES | | | | | | | |
|------------------------------|---------------------|----------------|------------|----------------|--|--|--|
| Туре | Type Product | | | Plant(s) | | | |
| Roof Cover | IKO Innovi TPO | 45, 60, 80-mil | ASTM D6878 | Hagerstown, MD | | | |
| Vapor Barrier | IKO MVP or MVP Sand | | N/A | Brampton, ON | | | |

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5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.
- 5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 This PEER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 This PEER does not include evaluation of roof edge termination. Refer to **FBC 1504.5** for requirements and limitations regarding edge securement for low-slope roofs.
- 5.6 Refer to **FBC 1511** for requirements and limitations regarding recover installations.
- 5.6.1 For mechanically attached components over existing roof decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
- 5.6.2 For bonded insulation or membrane over existing substrates in a re-roof (tear off) or recover installation, the existing deck or existing roof surface shall be examined for compatibility with the adhesive to be installed. If any surface conditions exist that bring system performance into question, field uplift testing in accordance with ANSI/SPRI IA-1, ASTM E907, FM Loss Prevention Data Sheet 1-52 or Testing Application Standard TAS 124 shall be conducted on mock-ups of the proposed new roof assembly.
- 5.6.3 For bonded insulation or membrane over existing substrates in a recover installation, the existing roof system shall be capable of resisting project design pressures on its own merit to the satisfaction of the Authority Having Jurisdiction, as documented through field uplift testing in accordance with **ASTM E907**, **FM Loss Prevention Data**Sheet 1-52 or Testing Application Standard TAS 124.
- 5.7 Refer to Appendix 1 for system attachment requirements for wind load resistance.
- 5.7.1 "MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per FBC 1504.9 has already been applied). Refer to FBC 1609 for determination of design wind loads.
- 5.7.2 For mechanically attached components or partially-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC Chapter 16. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, Roofing Application Standard RAS 117 or RAS 137. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (February 2020) for Zone 2/3 enhancements
- 5.7.3 For assemblies with all components fully bonded in place, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with **FBC Chapter 16**. No rational analysis is permitted for these systems.
- 5.8 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C.** <u>Rule 61G20-3</u>. Refer to the Product Approval of the component manufacturer for components listed in Appendix 1 that are produced by a Product Manufacturer other than the report holder on <u>Page 1</u> of this PEER.

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6. INSTALLATION:

IKO Innovi TPO Roof Systems shall be installed in accordance with **IKO INDUSTRIES LTD** published installation instructions, subject to the <u>Limitations of Use</u> noted herein.

7. Building Permit Requirements:

As required by the Building Official or Authority Having Jurisdiction to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by **F.A.C.** <u>Rule 61G20-3</u> QA requirements. Refer to <u>Section 4</u> herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

FM Approvals, QUA1860, (781) 255-4725, Joanna.Blaney@fmglobal.com

- THE 12-PAGES THAT FOLLOW FORM PART OF THIS PEER -



| ABLE | DECK | APPLICATION | TYPE | DESCRIPTION | PAGE |
|------------|---------------------|-----------------------------------|------|---|------|
| <u>1A</u> | Wood | New, Reroof (Tear-Off) or Recover | C-1 | Mechanically Attached Insulation, Bonded Roof Cover | 5 |
| <u>1</u> B | Wood | New, Reroof (Tear-Off), Recover | C-2 | Induction-Welded Roof Cover | 6 |
| <u>1c</u> | Wood | New, Reroof (Tear-Off), Recover | D-1 | Insulated, Mechanically Attached Roof Cover | 6 |
| <u>2A</u> | Steel | New, Reroof (Tear-Off) or Recover | B-1 | Mechanically Attached Base Insulation, Bonded Top Insulation, Bonded Roof Cover | 7 |
| <u>2B</u> | Steel | New or Reroof (Tear-Off) | B-2 | Mechanically Attached Thermal Barrier, Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover | 7 |
| <u>2c</u> | Steel | New, Reroof (Tear-Off) or Recover | C-1 | Mechanically Attached Insulation, Bonded Roof Cover | 8 |
| <u>2D</u> | Steel | New, Reroof (Tear-Off) or Recover | C-2 | Induction-Welded Roof Cover | 9 |
| <u>2E</u> | Steel | New, Reroof (Tear-Off) or Recover | D-1 | Insulated, Mechanically Attached Roof Cover | 11 |
| 3A | Structural concrete | New, Reroof (Tear-Off) | A-1 | Bonded Insulation, Bonded Roof Cover | 12 |

The following notes apply to the systems outlined herein:

- 1 The roof system evaluation herein pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 2 Unless otherwise noted, fasteners and stress plates shall be as follows. Fasteners shall be of sufficient length for the following engagements:

| | FASTENER/PLATE OPTIONS | | | | | | |
|-------------------|---------------------------------|--|--|--|--|--|--|
| DECK Т ҮРЕ | Вү | PARTS | MINIMUM ENGAGEMENT | | | | |
| Wood | IKO | with InnoviFast Insulation Plate | | | | | |
| | Altenloh, Brink & Co U.S., Inc. | penetration or minimum 1- inch wood plank | | | | | |
| | OMG, Inc. | OMG #12 Standard Roogrip, OMG #14 HD Fastener or OMG XHD Fastener with OMG 3-in. Galvalume Steel Plate (Flat) | embedment | | | | |
| | SFS Group USA, Inc. | Dekfast DF-#12-PH3, Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3 with Dekfast PLT-R-3 | | | | | |
| | IKO | InnoviFast All Purpose (AP) Fastener (#14) or InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast Insulation Plate | | | | | |
| Steel | Altenloh, Brink & Co U.S., Inc. | Trufast #14 HD or Trufast #15 EHD Fastener with Trufast 3" Metal Insulation Plate | Minimum ¾-inch steel | | | | |
| Steel | OMG, Inc. | OMG #14 HD Fastener or OMG XHD Fastener with OMG 3-in. Galvalume Steel Plate (Flat) | penetration and engage the top flute of the steel deck | | | | |
| | SFS Group USA, Inc. | Dekfast DF-#14-PH3 or Dekfast DF-#15-PH3 with Dekfast PLT-R-3 | top hate of the steer deck | | | | |

- 3 Unless otherwise noted, insulation may be any one layer or combination of FBC Approved (Local or Statewide) board(s) that meet FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover.
- 4 Minimum 200 psi, minimum 2-inch thick FBC Approved lightweight insulating concrete may be substituted for, or installed below, rigid insulation board for System Types B-1, C-1, C-2, D-1 or D-2, whereby fasteners are installed through the lightweight insulating concrete to engage the structural deck. The structural deck shall be of equal or greater type, thickness and strength to the steel and structural concrete deck listings. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction. This is a wind uplift resistance allowance and does not purport to address non-wind-uplift-related issues, such as deck venting or moisture levels within the LWIC and the potential effect on overlying components.
- 5 Preliminary insulation attachment: Unless otherwise noted, use FBC Approved roofing fasteners and plates and refer to Section 2.2.10.1.3 of FM Loss Prevention Data Sheet 1-29.
- 6 Unless otherwise noted, insulation adhesive application rates are as follows.
 - ✓ Ribbon or bead width is at the time of application; the ribbons/beads shall expand as noted in the manufacturer's published instructions.
 - ✓ If applying hot asphalt to concrete deck, deck shall be primed with ASTM D41 primer.
 - When multiple layers(s) of insulation and/or coverboard are installed in ribbon-applied adhesive, board joints shall be staggered.
 - ✓ The maximum edge distance from the adhesive ribbon to the edge of the insulation board shall be not less than one-half the specified ribbons spacing.

| Insulation Adhesive References | | | | | | | |
|--------------------------------|-------------------------|-----------------|-------------------------------|--|--|--|--|
| By ADHESIVE | | FBC FILE OR NOA | MINIMUM RATE | | | | |
| IKO | IKO Millennium Adhesive | N/A | Continuous, max. 12-inch o.c. | | | | |



- 7 Unless otherwise noted, all insulations are flat-stock or taper board of the minimum thickness noted.
- For adhered roof insulation and board-size: Unless otherwise noted, refer to Section 2.2.10.6.2 of FM Loss Prevention Data Sheet 1-29.
- 9 For mechanically attached components or partially-bonded insulation, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 PRIME design pressure determined in accordance with FBC Chapter 16. Elevated pressure zones shall employ an attachment density designed by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are ANSI/SPRI WD1, FM Loss Prevention Data Sheet 1-29, Roofing Application Standard RAS 117 and RAS 137. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 for Zone 2/3 enhancements.
- 10 For assemblies with all components fully bonded, the maximum design pressure for the selected assembly shall meet or exceed critical design pressure determined in accordance with FBC Chapter 16. No rational analysis is permitted for these systems.
- 11 For mechanically attached components over existing decks, fasteners shall be tested in the existing deck for withdrawal resistance. A qualified design professional shall review the data for comparison to the minimum requirements for the system. Testing and analysis shall be in accordance with ANSI/SPRI FX-1 or Testing Application Standard TAS 105.
- 12 RESERVED
- 13 Refer to FBC 1511 for requirements and limitations regarding recover installations. For Structural Concrete Deck or Recover Applications using System Type C-1 the base insulation layer is optional and for System Type C-2, D-1 or D-2, the insulation is optional. Alternatively, an FBC Approved insulation board or coverboard may be used as a separation layer. Board products shall be preliminarily attached prior to roof cover installation (Note 5). The separator component shall be documented as meeting FBC 1505 and, for foam plastic, FBC Chapter 26, when installed with the roof cover in Recover applications.
- 14 RESERVED
- 15 For bonded membrane applications, unless otherwise noted, refer to the following.

| | Membrane / Adhesive Combinations | | | | | | | | |
|--------------------|----------------------------------|-----------------------------------|----------------------|--|--|--|--|--|--|
| REFERENCE MEMBRANE | | ADHESIVE | APPLICATION | RATE | | | | | |
| BB-IBMA | IKO Innovi TPO | InnoviBond Membrane Adhesive | Contact (both sides) | 0.83 to 1.0 gal/square per surface | | | | | |
| BB-IBMA-LVOC | IKO Innovi TPO | InnoviBond Membrane Adhesive LVOC | Contact (both sides) | 0.83 to 1.0 gal/square per surface | | | | | |
| BB-IBMA-SPR | IKO Innovi TPO | InnoviBond Membrane Adhesive SPR | Contact (both sides) | 1,000 ft ² per #45 canister | | | | | |

- 15A For single-ply membranes in System Type D-1 steel deck applications, the roof membrane shall be run with its length perpendicular to the steel deck flutes.
- For System Type C-2 (induction welded), the roof cover shall be induction-welded to the stress plates using the proprietary induction-welding tool of the stress plate manufacturer, in accordance with the published instructions of the stress plate manufacturer. Care shall be taken to ensure that the stress-plates do not line-up with membrane seams.
- 16 Thermal Barrier and/or Vapor Barrier Options:
- 16A Structural Concrete Decks: The lesser of the MDP listings below vs. that for the selected assembly applies.

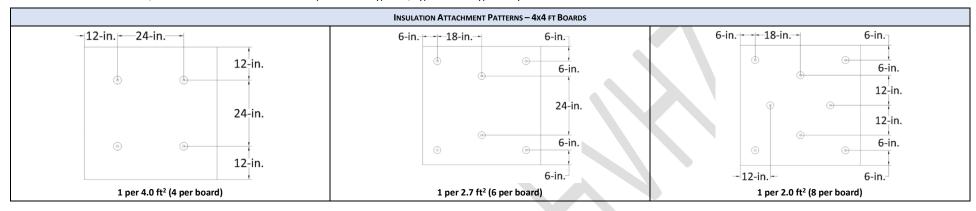
| | STRUCTURAL CONCRETE DECK: VAPOR BARRIER FOLLOWED BY ADHESIVE-APPLIED INSULATION | | | | | | | | | |
|---------|---|---------------------|---------------|---------------------------------------|-----------|--|--|--|--|--|
| OPTION | PRIMER | VAPOR | Barrier | Insulation Adhesive per Table 3A | MDD (pcr) | | | | | |
| # | PRIMER | TYPE APPLICATION | | (NOTES 6,7&8) | MDP (PSF) | | | | | |
| C-VB-1. | InnoviBond Membrane Adhesive SPR | IKO MVP or MVP Sand | Self-adhering | IKO Millennium Adhesive, 12-inch o.c. | -252.5 | | | | | |
| C-VB-2. | InnoviBond Membrane Adhesive SPR | IKO MVP or MVP Sand | Self-adhering | IKO Millennium Adhesive, 6-inch o.c. | -485.5 | | | | | |

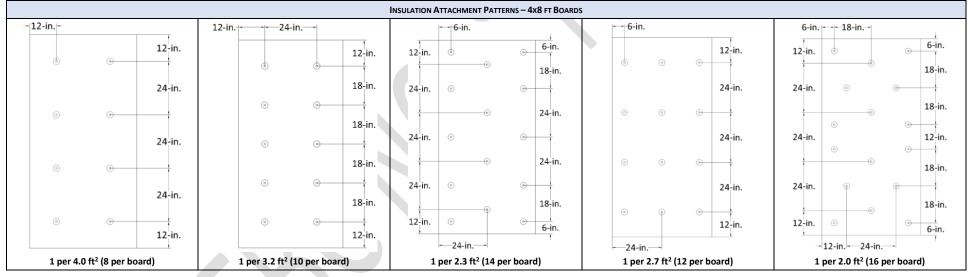
For System Types B-1, C-1, C-2, D-1 or Type D-2, IKO MVP or IKO MVP Sand may be installed atop the roof deck, or to an FBC Approved, loose-laid gypsum-based thermal barrier, prior to installation of the insulation and roof cover. The substrate shall be primed in accordance with IKO INDUSTRIES LTD requirements. Refer to FM Loss Prevention Data Sheet 1-29 for design and installation limitations.

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17 Unless otherwise noted, insulation or coverboard attachment patterns for Type B-1, Type B-2 and Type C-1 systems are as outlined below.







18 The following products are interchangeable within the scope of this PEER:

| | Accept | TABLE ALTERNATES | | | |
|--------------------|---------------------------------------|--------------------------------------|--------------------------------|-----------------|--|
| SUB-CATEGORY | LISTED PRODUCT HEREIN | ALTERNATE | Ву | FBC FILE OR NOA | |
| | InnoviFast HD Fastener | Trufast #15 EHD Fastener | Altoniah Drivak & CallC | | |
| | InnoviFast 2-3/8-in. HD Seam Plate | Trufast 2.4" Barbed Metal Seam Plate | Altenloh, Brinck & Co US, Inc. | FL4500 | |
| | InnoviWeld TPO Induction Plate | Trufast TPO IW Plate | inc. | | |
| | InnoviFast Insulation Fastener | Dekfast DF-#12-PH3 | | | |
| Roofing Fasteners | InnoviFast All Purpose (AP) Fastener | Dekfast DF-#14-PH3 | | FL20311 | |
| | InnoviFast Heavy Duty (HD) Fastener | Dekfast DF-#15-PH3 | CEC Crave UCA | | |
| | InnoviFast 2-3/8" HD Seam Plate | Dekfast PLT-R-2-3/8-6B | SFS Group USA | | |
| | InnoviFast Insulation Plate | Dekfast PLT-R-3 | | | |
| | InnoviWeld Induction Plate | isoweld F1-P-6.8-TPO Plate | | | |
| | IKOTherm-A, IKOTherm-A 25 psi | ACFoam II | | | |
| Deefing Insulation | IKOTherm-A III, IKOTherm-A III 25 psi | ACFoam III | Atlas Roofing Corp. | FL17989 | |
| Roofing Insulation | IKOTherm-A CoverShield | ACFoam HD CoverBoard | | | |
| | DensDeck Prime | DensDeck StormX Prime Roof Board | Georgia-Pacific Gypsum | FL1250 | |

^{19 &}quot;MDP" = Maximum Design Pressure is the result of testing for wind load resistance based on allowable wind loads. Refer to FBC 1609 for determination of design wind loads. (Notes 9 and 10)

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| | | | TABLE 1A: WOOD DECKS - NEW CONSTRUCTION, REI | POOE (TEAR-OEE) OR RECOVER | | TVEIVIO | |
|--------|--|---|---|---|--|--|--------------|
| | | | SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULA | | | | |
| System | Deck | Base Insulation Layer | | ation Layer | | | MDD |
| No. | (Note 1) | (Note 3, Note 13) | Туре | Fastener (<u>Note 2, Note 11</u>) | Attach (Note 17) | Roof Cover (Note 15) | MDP (psf) |
| W-1. | Min. 15/32-inch CDX plywood or wood plank; 2 ft span | (Optional) One or more layers, min. 0.5-inch, any combination | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III 0r IKOTherm-A III 25 psi | Note 2 | 1 per 4.0 ft² | BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR | -22.5 |
| W-2. | Min. 15/32-inch CDX plywood or wood plank; 2 ft span | One or more layers, min. 1.5-inch, any combination | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board. | Note 2 | 1 per 4.0 ft² | BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR | -22.5 |
| W-3. | Min. 15/32-inch CDX plywood or wood plank; 2 ft span | One or more layers, min. 1.5-inch, any combination | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board. | Note 2 | 1 per 3.2 ft² | BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR | -30.0 |
| W-4. | Min. 15/32-inch CDX plywood or wood plank; 2 ft span | One or more layers, min. 1.5-inch, any combination | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi or min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. | 24-in. © © © 6-in. 724-in. © © 6-in. 724-in. © © 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. | 24-in. © 36-in. 12 parts per 4x8-ft. Board | BB-IBMA, BB-IBMA- LVOC or BB-IBMA-SPR | -30.0 |



| | TABLE 1B: WOOD DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: PLATE-BONDED ROOF COVER | | | | | | | | |
|--------|---|--|--|---|--|-------|--|--|--|
| System | rstem Deck Insulation Layer Attachment | | | | Roof Cover (Note 15B) | MDP | | | |
| No. | (Note 1) | (<u>Note 3</u> , <u>Note 13</u>) | Fastener (Note 11) | Density | ROOI COVEL (NOTE 13B) | (psf) | | | |
| W-5. | Min. 15/32-inch CDX plywood or wood plank; 2 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviWeld TPO Induction Plates or InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 1 per 3.2 ft ² (10 parts per 4x8 ft board) (Note 17) | IKO Innovi TPO, min. 60-mil induction welded | -45.0 | | | |

| | TABLE 1c: WOOD DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE D-1: INSULATED, MECHANICALLY ATTACHED ROOF COVER | | | | | | | | | |
|--------|---|---|--|---|-----------------------|---|-------------------|---|---|-------|
| System | Deck (Note 1) | Thermal | Vapor | Insulation Layer (Not | e 3, <u>Note 13</u>) | | | Roof Cover (Note 15) | | MDP |
| No. | Deck (Note 1) | Barrier | Barrier | Туре | Fastener | Attach | Membrane | Fastener (Note 11) | Attach | (psf) |
| W-6. | Min. 15/32- inch CDX plywood or wood plank; 2 ft span | Optional, Note 16B | Optional, Note 16B | One or more layers, min. 1.5-inch, any combination | Note 2 | Note 5 | IKO Innovi TPO | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2-3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2-3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate | 6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld. | -45.0 |
| W-7. | Min. 15/32- inch CDX plywood or wood plank; 2 ft span | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board | IKO MVP or MVP Sand, self- adhering | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5- inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | Note 2 | 1 per 4.0 ft ² (Note 17) | IKO Innovi TPO | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2-3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2-3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate | 6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5-inch heat weld. | -75.0 |



| | TABLE 2A: STEEL DECKS – NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE B-1: MECHANICALLY ATTACHED BASE INSULATION, BONDED TOP INSULATION, BONDED ROOF COVER | | | | | | | | | | | |
|--------|---|--|------------------------|------------------------------|--|-------------------------------|-------------------------|--------------|--|--|--|--|
| System | Deals | Base Insulati | ion Layer | | Top Insulation Layer | | Do of Course | MDD | | | | |
| No. | Deck (Note 1) | Туре | Fasteners (Note 11) | Attach (Note 17) | Туре | Attach (Notes 6,7,8) | Roof Cover (Note 15) | MDP (psf) | | | | |
| S-1. | Min. 22 ga., Type B, Grade 40 steel | Min. 2.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | Note 2 | 1 per 2.7 ft ² | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | IKO Millennium Adhesive | BB-IBMA-SPR | -45.0* | | | | |
| S-2. | Min. 22 ga., Type B, Grade 40 steel | Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | Note 2 | 1 per 2.3 ft ² | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | IKO Millennium Adhesive | BB-IBMA-SPR | -45.0* | | | | |
| S-3. | Min. 22 ga., Type B, Grade 40 steel | Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | Note 2 | 1 per 2.3 ft ² | Min. 1.5-inch IKOTherm III or IKOTherm III 25 psi | IKO Millennium Adhesive | BB-IBMA | -45.0* | | | | |
| S-4. | Min. 22 ga., Type B, Grade 40 steel | Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | Note 2 | 1 per 2.3 ft ² | Additional Insulation: (Optional) Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi Coverboard: 0.5-inch IKOTherm CoverShield | IKO Millennium Adhesive | BB-IBMA | -45.0* | | | | |

| | TABLE 2B: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) SYSTEM TYPE B-2: MECHANICALLY ATTACHED THERMAL BARRIER, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER | | | | | | | | | | | |
|---------------|--|---|------------------------|------------------------------|--|-------------------------------|--|-------------------------------|--|----------------------------|---------------------------|--------------|
| | Thermal Barrier | | | | | | Base Insulation Layer | | Top Insulation Layer | | | |
| System No. | Deck (Note 1) | Туре | Fasteners (Note 11) | Attach (Note 17) | Primer | Vapor Barrier | Туре | Attach (Notes 6,7,8) | Туре | Attach (Notes 6,7,8) | Roof Cover (Note 15) | MDP (psf) |
| S-5. | Min. 22 ga., Type B, Grade 40 steel | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board | Note 2 | 1 per 2.7 ft ² | InnoviBond Membrane Adhesive SPR | IKO MVP, self- adhering | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | IKO Millennium Adhesive | (Optional) Additional layer(s) base insulation | IKO Millennium Adhesive | BB-IBMA-SPR | -45.0* |
| S-6. | Min. 22 ga., Type B, Grade 40 steel | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board | Note 2 | 1 per 2.7 ft ² | InnoviBond Membrane Adhesive SPR | IKO MVP, self- adhering | Min. 1.5-inch IKOTherm III or IKOTherm III 25 psi | IKO Millennium Adhesive | (Optional) Additional layer(s) base insulation | IKO Millennium Adhesive | BB-IBMA | -45.0* |
| S-7. | Min. 22 ga., Type B, Grade 40 steel | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum- Fiber Roof Board | Note 2 | 1 per 2.7 ft ² | InnoviBond Membrane Adhesive SPR | IKO MVP, self- adhering | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | IKO Millennium Adhesive | 0.5-inch IKOTherm CoverShield | IKO Millennium Adhesive | BB-IBMA or BB-IBMA-SPR | -45.0* |



| | | TABLE 2c: STEEL DI | ECKS - NEW CONSTRUCTION, RERO | OF (TEAR-OFF) OR RE <u>COVER</u> | | INCIVIO | |
|--------|--|---|--|----------------------------------|--|---|--------|
| | | | MECHANICALLY ATTACHED INSULAT | | | | |
| System | Deck (Note 1) | Base Insulation Layer | | Top Insulation Layer | Attach | Roof Cover | MDP |
| No. | Deck (Note 1) | (<u>Note 3</u> , <u>Note 13</u>) | Туре | Fasten (Note 11) | (Note 17) | (Note 15) | (psf) |
| S-8. | Min. 22 ga., Type B, Grade 40 steel | One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 0.5-inch IKOTherm CoverShield | Note 2 | 1 per 2.7 ft ² | BB-IBMA or BB- IBMA-SPR | -30.0* |
| S-9. | Min. 22 ga., Type B, Grade 40 steel, 6 ft span | One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 0.5-inch IKOTherm CoverShield or IKOTherm-A CoverShield | ēin. | 24-in. © 6-in. 24-in. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -30.0 |
| S-10. | Min. 22 ga., Type B, Grade 40 steel | One or more layer(s), min. 1.5-inch thick, min. 16- psi, FBC Approved roof insulation | Min. 0.25-inch DensDeck Prime | Note 2 | 1 per 2.7 ft² | BB-IBMA or BB- IBMA-SPR | -37.5* |
| S-11. | Min. 22 ga., Type B, Grade 40 steel | One or more layer(s), min. 1.5-inch thick, min. 16- psi, FBC Approved roof insulation | Min. 0.25-inch SECUROCK Gypsum- Fiber Roof Board | Note 2 | 1 per 2.7 ft² | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -37.5* |
| S-12. | Min. 22 ga., Type B, Grade 40 steel | One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 2-inch IKOTherm, IKOTherm III, IKOTherm 25 psi or IKOTherm III 25 psi | Note 2 | 1 per 2.7 ft² | BB-IBMA-SPR | -37.5* |
| S-13. | Min. 22 ga., Type B, Grade 40 steel | One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 2-inch IKOTherm III or IKOTherm III 25 psi | Note 2 | 1 per 2.7 ft² | BB-IBMA | -37.5* |
| S-14. | Min. 22 ga., Type B, Grade 40 steel, 6 ft span | (Optional) One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi | 6 © | 24-in. © 36-in. © 0. 36-in. 0. 0. 0. 0. 0. 0. 0. | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -37.5 |

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| | TABLE 2c: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-1: MECHANICALLY ATTACHED INSULATION, BONDED ROOF COVER | | | | | | | | | |
|--------|---|--|---|----------------------|--|---|-------|--|--|--|
| System | | Base Insulation Layer | | Top Insulation Layer | | Roof Cover | MDP | | | |
| No. | Deck (Note 1) | (<u>Note 3</u> , <u>Note 13</u>) | Туре | Fasten (Note 11) | Attach (Note 17) | (Note 15) | (psf) | | | |
| S-15. | Min. 22 ga., Type B, Grade 40 steel, 6 ft span | One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board. | o-in. | 24-in. © 36-in. 24-in. © 0. 36-in. 24-in. 12 parts per 4x8-ft. Board | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -37.5 | | | |
| S-16. | Min. 22 ga., Type B, Grade 40 steel, 6 ft span | One or more layer(s), min. 1.5-inch thick, min. 16-psi, FBC Approved roof insulation | Min. 0.5-inch DensDeck Prime | Note 2 | 1 per 2.0 ft ² | BB-IBMA or BB- IBMA-SPR | -60.0 | | | |
| S-17. | Min. 22 ga., Type B, Grade 40 steel, 6 ft span | One or more layer(s), min. 1.5-inch thick, min. 16- psi, FBC Approved roof insulation | Min. 0.5-inch SECUROCK Gypsum- Fiber Roof Board | Note 2 | 1 per 2.0 ft ² | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -60.0 | | | |

| | | TABLE 2D: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION | | 1 | | |
|------------|--|--|---|--|---|--------|
| System | Deck | Insulation (Note 2 Note 12) | Attachm | Roof Cover | MDP | |
| No. | (Note 1) | Insulation (Note 3, Note 13) | Fasteners (Note 11) | Spacing | (Note 15B) | (psf) |
| INNOVIFAST | r HEAVY DUTY (HD) FAST | ENER (#15) WITH INNOVIWELD TPO INDUCTION PLATES: | | | | |
| S-18. | Min. 22 ga., Type B, Grade 40 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviWeld TPO Induction Plates | 2 x 2 ft grid (staggered) | IKO Innovi TPO, induction welded | -60.0 |
| INNOVIFAST | r HD Fastener with Inn | OVIWELD TPO INDUCTION PLATE: | | | | |
| S-19. | Min. 22 ga., Type B, Grade 33 steel | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along either dimension. | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 1 per 5.3 ft ² (6 parts per 4x8 ft board on a 24x36- inch pattern) | IKO Innovi TPO, min. 60-mil, induction welded | -45.0* |



| | | | | | INEMIO | Cit." |
|---------------|--|--|--|---|---|-------|
| | | TABLE 2D: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR | | | | |
| Cuetous | Deck | SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION | Attachm | | Roof Cover | MDP |
| System No. | (Note 1) | Insulation (<u>Note 3</u> , <u>Note 13</u>) | Fasteners (Note 11) | Spacing | (Note 15B) | (psf) |
| S-20. | Min. 22 ga., Type B, Grade 33 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along the 8 ft dimension. | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 1 per 4.0 ft ² (8 parts per 4x8 ft board on a 24x24- inch pattern) | IKO Innovi TPO, min. 60-mil, induction welded | -52.5 |
| S-21. | Min. 22 ga., Type B, Grade 33 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along the 8 ft dimension. | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 1 per 2.0 ft ² (16 parts per 4x8 ft board on a 12x24- inch pattern) | IKO Innovi TPO, min. 60-mil, induction welded | -82.5 |
| S-22. | Min. 22 ga., Type B, Grade 80 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board Topmost boards shall be staggered 12-inch along the 8 ft dimension. | IKO Innovi TPO, min. 60-mil, induction welded | -105.0 | | |
| S-23. | Min. 22 ga., Type B, Grade 33 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A III 25 psi, IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -60.0 |
| S-24. | Min. 20 ga., Type B, Grade 33 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -75.0 |
| S-25. | Min. 22 ga., Type B, Grade 33 steel, 4 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -82.5 |
| S-26. | Min. 20 ga., Type B, Grade 33 steel, 5.5 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -82.5 |
| S-27. | Min. 22 ga., Type B, Grade 80 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -90.0 |
| S-28. | Min. 20 ga., Type B, Grade 33 steel, 5 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -90.0 |



| | TABLE 2D: STEEL DECKS - NEW CONSTRUCTION, REROOF (TEAR-OFF) OR RECOVER SYSTEM TYPE C-2: MECHANICALLY ATTACHED INSULATION, INDUCTION-WELDED ROOF COVER | | | | | | | | | |
|--------|---|---|--|--|---|-------|--|--|--|--|
| System | Deck | Insulation (Note 3, Note 13) | Attachm | ent | Roof Cover | MDP | | | | |
| No. | (Note 1) | insulation (Note 3, Note 13) | Fasteners (Note 11) | Spacing | (Note 15B) | (psf) | | | | |
| S-29. | Min. 18 ga., Type B, Grade 33 steel, 6 ft span | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm-A, IKOTherm-A III 25 psi, IKOTherm-A, IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, preliminarily attached (Note 5). | InnoviFast HD Fastener with InnoviWeld TPO Induction Plate | 6-inch o.c. in rows spaced 60-inch o.c. | IKO Innovi TPO, min. 60-mil, induction welded | -90.0 | | | | |

| | | | TABLE 2E: | STEEL OR STRUCTURAL CONCRETE DECKS - SYSTEM TYPE D-1: MECHANI | | | | AR-OFF) OR RECOVER | | |
|--------|--|---|--|--|------------|---|-------------------|---|--|-------|
| System | Deck | Thermal | Vapor | Insulation (Note 3, Note 1 | <u>3</u>) | | | Roof Cover (Note 15A) | | MDP |
| No. | (Note 1) | Barrier | Barrier | Туре | Fastener | Attach (Note 5) | Туре | Fasteners (Note 11) | Attach | (psf) |
| S-30. | Min. 22 ga., Type B, Grade 33 steel, 6 ft span | Optional, <u>Note</u> <u>16B</u> | Optional, Note 16B | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi. (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | Note 2 | 1 per 4.0 ft ² | IKO Innovi TPO | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2- 3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2- 3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate | 12-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld. | -30.0 |
| S-31. | Min. 22 ga., Type B, Grade 33 steel, 6 ft span | Optional, <u>Note</u> <u>16B</u> | Optional, Note 16B | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi. (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | Note 2 | 1 per 4.0 ft ² | IKO Innovi TPO | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2- 3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2- 3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate | 6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld. | -52.5 |
| S-32. | Min. 22 ga., Type B, Grade 33 steel, 6 ft span | Min. 0.5-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | IKO MVP or MVP Sand, self- adhering | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | Note 2 | 1 per 4.0 ft ² (Note 17) | IKO Innovi TPO | InnoviFast Heavy Duty (HD) Fastener (#15) with InnoviFast 2- 3/8" HD Seam Plate, InnoviFast HD Fastener with InnoviFast 2- 3/8-in. HD Seam Plate or OMG #15 Roofgrip with OMG 2-3/8 in. Round Barbed Seam Plate | 6-inch o.c. within min. 6-inch side laps spaced max. 114-inch o.c. Laps sealed with 1.5- inch heat weld. | -75.0 |



| | | | | CRETE DECKS – NEW CONSTRUCTION OR REROOF (TEAR-OFF) : BONDED INSULATION, BONDED ROOF COVER | | 102.010 | | | |
|---------------|---|--|---|--|---|---|--------|--|--|
| Sustans | REFER TO NOTE 16 FOR VAPOR BARRIER OPTIONS Suptom Pools Base Insulation Layer Top Insulation Layer(s) | | | | | | | | |
| System No. | Deck (Note 1) | Туре | Attach (Notes 6,7,8) | Туре | Attach (Notes 6,7,8) | Roof Cover (Note 15) | (psf) | | |
| C-1. | Min. 2,500 psi structural concrete | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi. | IKO Millennium Adhesive | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | IKO Millennium Adhesive | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -252.5 | | |
| C-2. | Min. 2,500 psi structural concrete | Min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi. | IKO Millennium Adhesive, 6- inch o.c. | Insulation: One or more layer(s), min. 1.5-inch IKOTherm, IKOTherm III, IKOTherm 25 psi, IKOTherm III 25 psi, IKOTherm-A, IKOTherm-A 25 psi, IKOTherm-A III or IKOTherm-A III 25 psi Coverboard: (Optional) Min. 0.5-inch IKOTherm CoverShield, IKOTherm-A CoverShield, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board | IKO Millennium Adhesive, 6- inch o.c. | BB-IBMA, BB- IBMA-LVOC or BB-IBMA-SPR | -485.5 | | |

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